



431 River Road
Bow, NH 03304

October 15, 2020

Submitted on-line via NetDMR

U.S. Environmental Protection Agency
Water Technical Unit (SMR-04)
OES4 – SMR
5 Post Office Square - Suite 100
Boston, MA 02109-3912

Reference: NPDES Permit No. NH0001465, Merrimack Station, GSP Merrimack LLC, issued June 25, 1992, modified October 22, 1992, modified January 10, 2018.

Dear Sir/Madam:

Merrimack Station
Monthly NPDES Discharge Monitoring Report
September 2020

In compliance with Part I, Section B.1., of the NPDES permit (see Reference), Granite Shore Power LLC (GSP) herein submits the monthly NPDES report for Merrimack Station for the month of September. With the following exception, all sampling and analyses were conducted by station personnel in accordance with EPA approved procedures referenced at 40 CFR Part 136; Eastern Analytical, Inc. of Concord, NH, performed the iron, copper, total suspended solids, and oil and grease analyses on the samples collected at Outfall 003A. There were no oily sheens, floating solids, or foam observed in any of the outfall discharges in other than trace amounts. Significant beds of floating algae were occasionally observed collecting at the bridge at Outfall 003 this month.

As instructed by the agencies, GSP now reports a concentration of zero ("0") when the analytical result is less than the method detection limit (MDL). For this report, the following MDLs were used: Total Residual Oxidants = 0.05 mg/l (SM 4500-Cl E-2011); Oil & Grease = 5.0 mg/l (EPA 1664 Rev. B).

The pH at Outfall 003 (Station S-0) was recorded outside the range of 6.5 SU to 8.0 SU on three days during the month. With both units off-line, the lack of cooling water flow from the station aggravated in-situ monitoring by creating stagnant conditions and allowing large beds of floating vegetation to encroach upon the monitoring equipment. Permit compliance was maintained however, as the effluent pH mostly tracked the naturally occurring river pH at Station N-5 (see the attached data sheets), and discrepancies were within the analytical limits of the equipment accuracy and precision. The more extreme diurnal swings in pH are likely related to the photosynthesis/respiration cycle of the algae blooms. As such, these pH values were not the result of activities at Merrimack Station and should not be recorded as violations in the Integrated Compliance Information System, Enforcement and Compliance History Online, or any other EPA compliance database.

October 15, 2020

This report is required by, and prepared specifically for, the U.S. Environmental Protection Agency (EPA). It presents truly, accurately and completely, the observed measurements and analyses required by the EPA to be performed or submitted, but only such observed results. It is not intended as an assertion of the accuracy of any instrument, reading, or analytical result, nor is it an endorsement of the suitability of any analytical or measurement procedure.

If you have any questions regarding this report, please call Allan Palmer, Senior Engineer, at (603) 230-7951.

Sincerely,

GRANITE SHORE POWER



Elizabeth H. Tillotson
Executive Director of Administration & Regulatory Affairs

Enclosures

GSP MERRIMACK LLC
MERRIMACK GENERATING STATION
ENVIRONMENTAL MONITORING PROGRAM

MONTHLY SUMMARY REPORT FOR September 2020

STATION: N5

PARAMETER: PH

DAY	MAXIMUM (PARAM)	TIME	DAILY AVERAGE	MINIMUM (PARAM)	TIME	#of INT.
09/01/20	8.03	1645	7.63	6.99	0745	89
09/02/20	7.46	0015	6.94	6.78	1145	96
09/03/20	7.13	1615	6.88	6.70	0845	96
09/04/20	7.24	1945	6.95	6.78	0745	96
09/05/20	7.13	2000	6.95	6.81	0730	96
09/06/20	7.09	1700	6.93	6.79	0730	96
09/07/20	7.68	1700	7.11	6.84	0645	96
09/08/20	7.69	1715	7.15	6.87	0815	96
09/09/20	7.69	1430	7.17	6.92	0630	96
09/10/20	7.10	0015	6.98	6.89	0700	96
09/11/20	7.21	2045	7.02	6.87	0615	96
09/12/20	7.14	1730	6.99	6.88	0630	96
09/13/20	7.29	1715	6.99	6.85	0715	96
09/14/20	7.13	1430	6.97	6.84	0730	96
09/15/20	7.13	1700	7.02	6.90	0645	96
09/16/20	7.29	1800	7.02	6.89	0645	96
09/17/20	7.02	0015	6.96	6.90	0715	96
09/18/20	6.97	0015	6.89	6.81	0645	96
09/19/20	6.97	1745	6.94	6.90	0015	96
09/20/20	6.95	1615	6.92	6.89	0700	96
09/21/20	6.94	1715	6.90	6.87	0645	96
09/22/20	6.94	1645	6.89	6.85	2115	96
09/23/20	7.26	0945	6.93	6.87	0015	96
09/24/20	6.95	0015	6.91	6.87	2145	96
09/25/20	6.98	1945	6.92	6.89	0630	96
09/26/20	6.97	2215	6.93	6.89	0800	96
09/27/20	6.93	0030	6.89	6.86	2200	96
09/28/20	6.97	1815	6.90	6.85	0845	96
09/29/20	6.98	1815	6.90	6.85	0645	96
09/30/20	6.97	1900	6.91	6.84	0845	96
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AVERAGE	7.17		6.98	6.86		
STD DEV.:	0.28		0.14	0.05		

GSP MERRIMACK LLC
MERRIMACK GENERATING STATION
ENVIRONMENTAL MONITORING PROGRAM
MONTHLY SUMMARY REPORT FOR September 2020

STATION: Zero

PARAMETER: PH

DAY	MAXIMUM (PARAM)	TIME	DAILY AVERAGE	MINIMUM (PARAM)	TIME	#of INT.
09/01/20	7.36	1730	6.69	6.39	0615	96
09/02/20	6.97	1830	6.70	6.57	0730	96
09/03/20	7.07	1700	6.72	6.56	0645	96
09/04/20	7.25	1700	6.86	6.57	0715	96
09/05/20	7.16	1915	6.88	6.60	0715	96
09/06/20	7.07	1615	6.83	6.59	0700	96
09/07/20	7.14	1800	6.82	6.54	0715	96
09/08/20	8.35	1800	6.97	6.57	0630	96
09/09/20	8.34	1900	7.11	6.62	0615	96
09/10/20	7.49	1630	6.99	6.68	0715	96
09/11/20	7.40	1645	6.94	6.63	0430	96
09/12/20	7.02	1915	6.79	6.63	0800	96
09/13/20	7.00	1745	6.78	6.59	0715	96
09/14/20	7.17	1630	6.86	6.60	0615	96
09/15/20	7.04	1145	6.86	6.71	0545	96
09/16/20	6.99	1045	6.74	6.64	2130	96
09/17/20	7.34	1615	6.90	6.63	0345	96
09/18/20	7.04	1700	6.83	6.66	0915	96
09/19/20	7.43	1615	6.97	6.69	0415	96
09/20/20	7.41	1700	7.04	6.73	0700	96
09/21/20	7.22	2115	7.02	6.79	0700	96
09/22/20	7.61	1630	7.12	6.84	0745	96
09/23/20	7.61	1730	7.23	6.92	0645	96
09/24/20	7.30	0015	7.08	6.91	0730	96
09/25/20	7.44	1800	7.10	6.81	0745	96
09/26/20	7.27	1645	7.06	6.84	0800	96
09/27/20	7.24	1530	7.02	6.80	0600	96
09/28/20	7.36	1645	7.11	6.96	0145	96
09/29/20	7.23	1545	7.08	6.88	0830	96
09/30/20	7.32	1530	7.05	6.82	0915	96
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AVERAGE	7.32		6.94	6.69		
STD DEV.:	0.33		0.14	0.14		